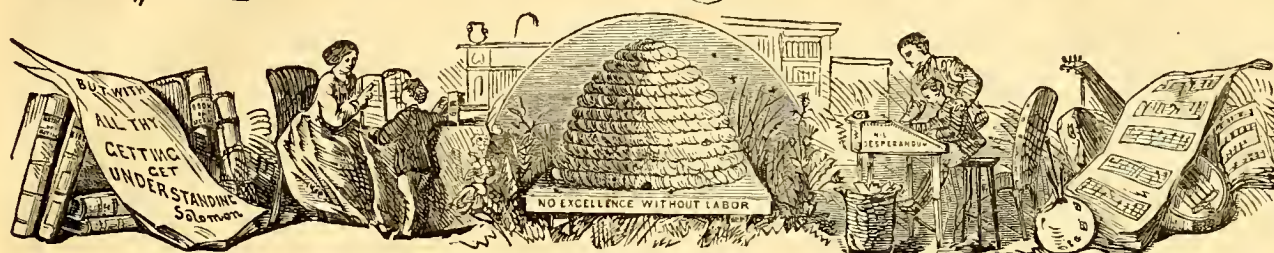


The Juvenile Instructor



VOL. 5.

SALT LAKE CITY, SATURDAY, FEBRUARY 19, 1870.

NO. 4.

For the *Juvenile Instructor*.

THE SWITZER'S HOME.

THE scene we give you to-day is thoroughly Swiss—the stupendous mountains with their summits covered with snow; the lake which seems to be close to their bases, on the bottom of which a solitary sail is seen; the cattle climbing the mountain with the herdsman watching them; and the young man and little girl in the foreground; all indicate that the land is Switzerland. Whether these mountains are bleak and cold, and exposed to frost and snow two thirds of the year, or whether they are in that part of the Alps of which the poet writes—

“Sublime, but neither bleak nor bare.

Nor misty are the mountains there,
Sottly sublime—profusely fair,
Up to their summits clothed in green,

And fruitful as the vales between—
we cannot tell. But many of the highest and bleakest mountains produce rich pasturage and sweet grass, upon which vast herds of cattle are fed.

The wealth of the people of Switzerland, in a great measure, lies in cattle and their produce. The meadows, in the most of the valleys, produce an abundance of rich and nutritious grass, and the bright green in which the valleys and mountains are clothed, form a delightful feature in Swiss scenery. In traveling through that country we were struck with the appearance of the mountains. From their bases, as far up their side as the eye could reach, they were covered with grass; differing in this respect from our mountains, which, in many instances, are destitute of vegetation. The mountain pasturages, in that country, are to a certain extent common land, in which the inhabitants of the neighboring town or village have the right of pasturing a certain number of head of cattle.

“In the spring, as soon as the snow has disappeared, and the young grass sprouts up, the cattle are sent from

the villages up to the first and lower pastures. Should a certain portion of these be exhausted, they change their quarters to another part of the mountain. Here they stay till about the 10th or 12th of June, when the cattle are driven to the middle range of pastures. That portion of the herds intended for a summer campaign on the highest Alps remain here till the beginning of July, and on the 4th of that month generally ascend to them; return to the middle range of pastures about seven or eight weeks

afterwards, spend there about fourteen days or three weeks, to eat the aftergrass; and finally return into the valleys about the 10th or 11th of October, where they remain in the vicinity of the villages till driven by the snow and tempests of winter into the stables.

“That portion of the cattle, on the other hand, which is not destined to pass the summer on the higher Alps, and are necessary for the supply of the village with milk and butter, descend from the middle pastures on the 4th of July into the valley, and consume the grass upon the pasturage belonging to the commune, till the winter drives them under shelter. The very highest Alpine pasturages are never occupied more than three or four weeks at the furthest.”

In one valley, that of the Engadine, or Valley of the Upper Inn, one of the villages is 5,600 feet above the sea—about 1,200 feet higher than Salt Lake

valley. There is no other valley among the Alps where so many and such large and populous villages are to be found at so high an elevation. The inhabitants of this valley let out their higher pastures every summer to shepherds, who come with their flocks from the Italian side of the Alps. The stock reach there very lean and in poor condition about the beginning of July; after re-



maining three months, they return with them fat and bearing long fleeces, which they sell to the manufacturers of wool in their own country.

The fine engraving on page 29, gives another view of Switzerland. In looking at that you can form some idea of the reasons why Switzerland has been so difficult a country to conquer. A few determined, liberty-loving men, in such wild places, could oppose and conquer an army of invaders. One instance occurs to us, out of many of this character in Swiss history. An Archduke of Austria, at the head of 3,000 men, hoped, on one occasion, to take the men of Canton Appenzell by surprise, and with this large force overwhelm them. But a handful of mountaineers, (not over 400 when all gathered) under the conduct of Count Rudolph of Wessenberg, assembled in haste, gave them battle, and defeated the invaders. They slew 900 of them, and their blood discolored the mountain torrent which ran past the place where they fought. They only lost twenty of their own number.

[For the *Juvenile Instructor*.]

Chemistry of Common Things.

CALCIUM. - LIME.

WHEN we look at a beautiful pearl, without some knowledge of the changes wrought by chemistry, it is hard to realize that the rough-looking mountain limestone and the delicate looking gem are closely related to each other. Yet such is the case; calcine either, the same result is obtained: an oxide of calcium, or lime. Wonderful are the transformations which matter undergoes; the same element that gives hardness to the mortar of our buildings, gives hardness and solidity to the substance of our bones; and that element is a metal, calcium. This metal is the basis of lime; one of the most important natural substances.

In our mountains, lime-stone is quarried to make lime; a kiln is built, and the rough stone, broken into suitable pieces, is thrown in with either wood or coal to burn. When lime-stone is made red-hot it undergoes a chemical change, the carbonic acid is expelled; from being a carbonate of lime (Ca. O. plus C2. O.) it becomes a protoxide of the metal (Ca. O.) In the article on soap we saw that this caustic-lime, or "quick-lime," may be used to deprive the alkaline carbonates of their carbonic acid, this is by reason of its greater affinity.

This protoxide (quick-lime) is very useful to the builder; with it "mortar" is made; water is poured over it, it swells, and cracks, steam rises, great heat is developed. Presently it falls to powder; and, in this state, is ready to be mixed up with clean washed sand and more water, into a tough mass of doughy consistency, in which state it is used as a cement or mortar for rock and brick work. The sand used for this purpose should be free from earthy matter, it then not only adds to the bulk, but gives greater hardness to mortar. It may be remembered that it has been shown, in speaking on silice, that silica is soluble in alkalies. Now lime is of an alkaline nature, and experience has shown that a chemical action takes place when silica (sand) and lime are mechanically mixed together. But this compound called mortar does not depend upon the sand for acquiring hardening properties, so far as insolubility or solidity is concerned. When quick-lime is "hydrated," that is, when water is added to it, the hydrogen

combines with the lime, which still retains its affinity for C2. O. (carbonic acid), with which it gradually enters into chemical combination, absorbing that gas from the atmosphere. This is why, in putting up mortar, care must be taken not to allow it to dry too rapidly, which it does if exposed to intense heat; or, to be frozen, as water expands in passing into the state of ice, both of which unfavorable circumstances arrest and prevent the necessary chemical changes. The student may notice the action of "slacking" lime with advantage; very striking phenomena are presented; two cold bodies produce intense heat; a solid body expands, and a liquid (water) becomes solid. The changes are caused by two compound bodies (Ca. O., oxide of calcium, and O2 H., water) forming a compound that has not the same capacity for "heat" they had in their separate state, the latent, thus becomes sensible heat; the water changes its state by becoming solid and occupying less space.

Somewhat similar changes take place when the sulphate of lime (gypsum) is used; this substance is sulphuric acid in combination with lime. It is used as plaster of Paris; for making "plaster casts" and small statues, a branch of business in which the Italians excel. Cornices are moulded of this substance, it is used for various purposes of embellishment where a quickly hardening cement is needed. Fac similes of coins and medals are taken in "fine" plaster; the cabinets of the curious are much enriched by exact representations of works of Art, which cannot be multiplied by the artist.

There are many other uses of lime that will yet be referred to. The chloride is used for bleaching and disinfecting purposes; it is made by passing the vapor of chlorine over lime. Also the phosphate of lime, the principal constituent of bone; it is used too for illuminating purposes; the Drummond Light is produced by passing the flame of oxygen and hydrogen on to a piece of lime. It is used as a flux in working iron ore; and for fertilizing our fields.

BETH.

[For the *Juvenile Instructor*.]

Original Poetry.

LITTLE LUCY.

Look not to the grave for the lov'd one;
The beautiful one is not there;
It now shines in the mansions of beauty,
Far away from earth's trouble and care.

She lives with the pure and the lovely
The noble, the good and the wise;
In the sunbeams of love and affection,
Where happiness beams from the skies.

O, why should she suddenly leave us?
O, wherefore so transient her stay?
She came, like an angel to cheer us,
And then like a flow'r, pass'd away.

By coming to earth, she inherits
Her birthright, her parents and home—
The gifts and the blessings of Priesthood
In eternity's ages to come.

She has gained the dear, beautiful casket,
Which the grave will, ere long, purify,
To come forth in the first resurrection
And inhabit bright mansions on high.

E. R. S.

THE POTTER'S ART.

From "TRIUMPHS OF INVENTION AND DISCOVERY."—
Published by T. Nelson & Sons, London.

FROM that moment he was more engaged than ever in the search. He had discovered the white enamel. The next thing to be done was to apply it. He must now work at home and in secret. He set about moulding vessels of clay after designs of his own, and baked them in a furnace which he had built in imitation of the one at the pottery. The grinding and compounding of the ingredients of the enamel cost him the labor, day and night, of another month. Then all was ready for the final process.

The vessels, coated with the precious mixture, are ranged in the furnace, the fire is lit and blazes fiercely. To stint the supply of fuel would be to cheat himself of a fortune for the sake of a few pence, so he does not spare wood. All that day he diligently feeds the fire, nor lets it slacken through the night. The excitement will not let him sleep even if he would. The prize he has striven for through these weary years, for which he has borne mockery and privation, is now all but within his grasp; in another hour or two he will have possessed it.

The grey dawn comes, but still the enamel melts not. His boy brings him a portion of the scanty family meal. There shall soon be an end to that miserable fare! More faggots are cast on the fire. The night falls, and the sun rises on the third day of his tending and watching at the furnace door, but still the powder shows no signs of melting. Pale, haggard, sick at heart with anxiety and dread, worn with watching, parched and fevered with the heat of the fire, through another, and yet another and another day and night, through six days and six nights in all, Bernard Palissy watches by the glaring furnace, feeds it continually with wood, and still the enamel is unmelted. "Seeing it was not possible to make the said enamel melt, I was like a man in desperation; and although quite stupified with labor, I counselled to myself that in my mixture there might be some fault. Therefore I began once more to pound and grind more materials, all the time without letting my furnace cool. In this way I had double labor, to pound, grind, and maintain the fire. I was also forced to go again and purchase pots in order to prove the said compound, seeing that I had lost all the vessels I had made myself. And having covered the new pieces with the said enamel, I put them into the furnace, keeping the fire still at its height."

By this time it was no easy matter to "keep the fire at its height." His stock of fuel was exhausted; he had no money to buy any more, and yet fuel must be had. On the very eve of success—alas! an eve that so seldom has a dawn—it would never do to lose it all for want of wood; not while wood of any kind was procurable. He rushed into the garden, tore up the palings, the trellis work that supported the vines, gathered every scrap of wood he could find, and cast them on the fire. But soon again the deep red glow of the furnace began to fade, and still it had not done its work. Suddenly a crashing noise was heard; his wife, the children clinging to her gown, rushed in. Palissy had seized the chairs and table, had torn the door from its hinges, wrenched the window frames from their sockets, and broken them in pieces to serve as fuel for the all-devouring fire. Now he was busy breaking up the very flooring of the house. And all in vain. The composition would not melt.

"I suffered an anguish that I cannot speak, for I was quite exhausted and dried up by the heat of the furnace.

Further to console me, I was the object of mockery; even those from whom solace was due, ran, crying through the town that I was burning my floors. In this way my credit was taken from me, and I was regarded as a madman," if not, as he tells us elsewhere, "as one seeking ill-gotten gains, and sold to the evil one for filthy lucre."

He made another effort, engaged a potter to assist him, giving the clothes off his own back to pay him, and afterwards receiving aid from a friendly neighbor, and this time proved that his mixture was of the right kind. But the furnace having been built with mortar which was full of flints, burst with the heat, and the splinters adhered to the pottery. Sooner than allow such imperfect specimens of his art to go forth to the world, Palissy destroyed them; "although some would have bought them at a mean price."

Better days, however, were at hand for himself and family. His next efforts were successful. An introduction to the Duke of Montmorency procured him the patronage of that nobleman, as well as of the king. He now found profitable employment for himself and food for his family. "During the space of fifteen or sixteen years in all," he said afterwards, "I have blundered on at my business. When I had learned to guard against one danger, there came another on which I had not reckoned. All this caused me such labor and heaviness of spirit, that before I could render my enamels fusible at the same degrees of heat, I verily thought I should be at the door of my sepulchre. . . . But I have found nothing better than to observe the counsel of God, his edicts, statutes, ordinances; and in regard to his will; I have seen that he has commanded his followers to eat bread by the labor of their bodies, and to multiply their talents which he has committed to them."

When the Reformation came, Palissy was an earnest reformer, on Sunday mornings assembling a number of simple, unlearned men for religious worship, and exhorting them to good works. Court favor exempted him from edicts against Protestants, but could not shield him from popular prejudice. His workshops at Saintes were destroyed; and to save his life and preserve the art he had invented, the king called him to Paris as a servant of his own. Thus he escaped the massacre of St. Bartholomew. Besides being a skillful potter, Palissy was a naturalist of no little eminence. "I have had no other book than heaven and earth, which are open to all," he used to say; but he read the wondrous volume well, while others knew it chiefly at second-hand, and hence his superiority to most of the naturalists of the day. He was in the habit of lecturing to the learned men of the capital on natural history and chemistry. When more than eighty years of age he was accused of heresy, and shut up in the Bastille. The king, visiting him in prison, said, "My good man, if you do not renounce your views upon religious matters, I shall be constrained to leave you in the hands of my enemies." "Sire," replied Palissy, "those who constrain you, a king, can never have power over me, because I know how to die." Palissy lived in prison till he died, an old worn man, fourscore and upwards.

Before his death his wares had become famous, and were greatly prized. The enamel, which he went through so much toil and suffering to discover, was the foundation of a flourishing national manufacture.

(To be continued.)

UNITED to Christ all is heaven; separated from him all is hell.

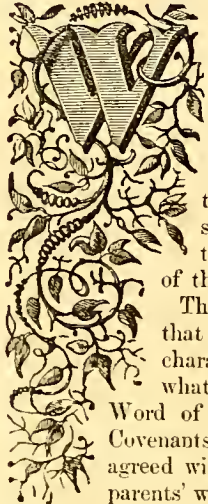
BETTER suffer for truth than prosper for falsehood.

The Juvenile Instructor.

GEORGE Q. CANNON - - - EDITOR.

SATURDAY, FEBRUARY 19, 1870.

EDITORIAL THOUGHTS.



Once knew a boy whose mother took great pains to impress upon him the folly of drinking intoxicating beverages. She wanted her boy to grow up to manhood free from the dreadful habit of drinking beer, ale, wine and spirits. He was but a little fellow when she commenced to teach him upon this point; but her words sunk into his heart, and he resolved, and told her so, that he never would be guilty of this habit.

The same boy was taught by his parents that tea and coffee and other drinks of that character were not good. He afterwards read what the Lord says in the revelation called the Word of Wisdom, in the Book of Doctrine and Covenants, and he saw that his parents' teachings agreed with the word of the Lord. There were his parents' wishes and the Lord's word to induce him to refrain from the use of these articles, and he was confirmed in his resolutions.

His mother died while he was yet a boy; his father also passed away in less than two years afterwards. There was no lack of temptations to induce him to break the counsel of his parents. Often the remark was made, "a drink won't hurt you; why not take a little and be like the rest of us?" But he did not choose to do so. His companions might drink whisky or beer, if they wanted to do so; but his mother's words of warning were ever present with him, and he thought it better to offend the companion who wanted him to drink, than to break the promise he had made to her. He proved, however, that his refusal to drink did not cause his associates to think any less of him, and he found that his firmness in resisting the proffered temptation had a good effect upon others.

But you might think that he would not be so particular about tea and coffee, and that he would fall into the habit of drinking them. In the days of his youth, and after he grew to manhood the habit of drinking these beverages was very common among the Saints. But he recollected the wishes of his parents, and no matter what company he was in, he preferred to be singular and unlike the rest than to fall into this custom. He was sent on missions; but he found that his practicing what the Lord taught gave him greater influence with the people than if he had not obeyed Him. He is now a man of family; and he can say to his children: "I have never drank a glass of liquor in my life; the habit of drinking tea and coffee I have never known; and it is because I obeyed my parents; children, will you do likewise?"

No boy can ever be a reliable man who does not have fixed principles and firmness enough to maintain them. As soon as boys and girls are old enough to understand what is right, they should adopt a rule of conduct for themselves; and they should never allow companions to persuade them to break that rule. They who suffer themselves to be persuaded to do things which their consciences tell them are wrong, grow up to be men and women for whom nobody entertains any respect.

THE Egyptians at one time imagined themselves to be the most ancient nation upon earth. To prove this, one of the kings of Egypt employed a very extraordinary experiment. His name was Psammetichus. We do not vouch for the truth of the story, we merely relate it as we find it told. He commanded two children, newly born of poor parents, to be brought up in a hovel that was to be kept constantly shut. One story states that they were committed to the care of nurses whose tongues were cut out; another states that they were placed in charge of a shepherd, who was to feed them with the milk of goats. This shepherd was commanded not to suffer any person to enter into this hut, nor himself to speak even a single word in the hearing of these children. For two years they were thus confined, when, one day, as the shepherd was entering the hut to feed them, they both cried out, with hands extended towards him: *beccos, beccos*. They repeated this word frequently afterwards. The shepherd was surprised to hear a language that was quite new to him; for *beccos* was not an Egyptian word. He therefore sent word to the king that the children had spoken, but he could not understand what they said. The king ordered the children to be brought before him, that he himself might be a witness to what had been told him. The king's presence made no difference with the children, they again stammered out the word *beccos*. Inquiry was then made to learn what nation used this word; and it was found that the Phrygians called bread by that name. The Egyptians had for many ages claimed the glory of being the oldest nation upon the earth; but after this experiment they felt they could claim it no longer. The first words these children spoke naturally, without being taught by man, was not their language, it was the language of another people. From that time they gave the Phrygians the honor of being more ancient than themselves.

Some historians imagine that these children must have mimicked the goats whose milk they were fed upon; for the cry of these animals bears some resemblance to *bec* or *beccos*.

TRUE education does not consist alone in a knowledge gained from books. A man may be very learned in book knowledge and yet be a great dunce in other respects and scarcely able to gain a living. We have seen men who could scarcely read and write who were far better educated in the true sense of the word than many so-called learned men. Their knowledge was of a true, every-day, useful character. They had educated brains and were well cultivated in other respects, and were worth any number of educated book-worms. We place a high value upon education of the mind by means of book learning; but we would rather see our juveniles, if they must only learn one branch of education, well trained in the arts of life rather than to see them mere book scholars. But they need not be confined to any one branch of education. Every child among the Latter-day Saints should learn to work with his hands, as well as with his head. In learning to work with the hands the head should not be neglected; for it is a well-established fact that men who have healthy employment for their brains, and who keep their brains active, live longer than those who work with their hands alone.

At Carisbrook Castle, in the Isle of Wight, is a well 210 feet deep and 12 wide. The interior is lined by smooth masonry, and, if a pin is dropped into it, the sound produced when it strikes the water, is distinctly heard.—*Selected*.

How sweet to work all day for God, and then lie down at night beneath His smile!

[For the *Juvenile Instructor*.]

MOUNT PILATUS.

IN Switzerland there is a high mountain which is called *Pilatus*. It rises in gloomy grandeur from the very shores of Lake Lucerne, or the Lake of the Four Forest Cantons, and its height is 7,000 feet above the sea. It is the foremost in the Alpine chain of the north, and the clouds delight to gather about it. The Lake is very subject to storms of frightful violence, and they nearly always come from the direction of old *Pilatus*. This mountain is said to have derived its name from Pontius Pilate, who was driven away from Rome, became a wretched wanderer in Switzerland or Helvetia, as it was then called, a very wild country in those days—and finally, in the horrors of a guilty conscience, plunged from one of the crags of

bottom of them all, and that the Lake would never be safe until his troubled spirit was put at rest. And so strictly was the ascent of this mountain forbidden, that a natural-

ist, Gessner, had to obtain a special license to pursue his investigations there. It was once tho't that if any human being intruded upon the mountain, a storm would be sure to follow. But now any person can ascend *Pilatus* who wishes to do so. The people have changed their opinion about Pilate's spirit causing the storms.

This Lake was a familiar place to William Tell, the hero of Switzerland. He was as skillful in managing a boat as he was in shooting with the cross bow, and his fame was widely known. After he had shot an apple from his son's head



[THE SWITZER'S HOME—See page 25.]

the mountain into the Lake and perished. On this account it has been called *Pilatus*. So many are the storms which come down from this point, that the people who dwell on the shores of the Lake supposed that Pilate was at the

by order of the tyrant Gessler, an arrow, which he had concealed in his clothes, dropped, and the tyrant asked why he had hidden it. He replied, that with that arrow he had intended to shoot him if his son had been slain. This

enraged Gessler, and he bound him in chains and started down the Lake to carry him prisoner to a dungeon in a distant castle. A furious storm broke upon them. Gessler and his men could not manage the boat, and they were in danger of being lost. He ordered Tell to be released, to guide the little vessel. He ran it to the bank, jumped ashore, and escaped. Before Gessler reached his castle, Tell had waylaid him, and sent an arrow to his heart.

[For the *Juvenile Instructor*.]

Biography.

JOSEPH SMITH, THE PROPHET.

DUNN presented an order from Governor Ford for all the State arms in possession of the Nauvoo Legion. This order Joseph immediately countersigned.

He also addressed a letter to the Governor, stating that he had met Captain Dunn, learned his errand, and had concluded to return to Nauvoo with him to see that the delivery was properly made; after which, he should accompany him to Carthage and cheerfully submit to any requisition of the Governor's.

In alluding to this action of Ford's we can not find language to express the frightful baseness of his conduct. In the midst of an armed mob whom he knew to be thirsting for the blood of Joseph and the people of Nauvoo, he could not be ignorant of what the effect would be of taking away the arms of the Legion. He not only wanted them disbanded, but disarmed. Disbanded men, if they had arms, were still capable of banding together and defending themselves, or of avenging any outrage that might be committed on the persons of their leaders. It was not safe, therefore, to suffer them to have any arms that could be taken from them. He wished them to be made as defenceless and helpless as possible; and could he have had the power, he would have had them tied hand and foot and laid at the feet of the mob for them to wreak their bloody vengeance upon them free from danger. But even if they should refuse to give up the State arms, and attempt any overt act, he hoped still to have them in his power: he could call their actions treason, and then he would have an excuse for letting loose his mob militia upon them, and their destruction would be sure. Was ever conduct more cold-blooded and devilish than this? History may be searched in vain for a greater instance of perfidy in a man who held no greater power than Ford did. If he had possessed the power of a Nero or an Ahab, his acts would have exceeded theirs in atrocity and cruelty.

It was with reluctance that the men gave up their arms. They would, of course, have done anything that Joseph requested of them. But they looked upon this as a trap. They had been required to give up their arms in Far West, and they knew what followed; and they thought this delivery on this occasion was for the purpose of leaving them in a condition that their foes could kill them. Joseph rode down home twice to bid his family farewell. He appeared solemn and thoughtful, and he said to several individuals that he expected to be murdered. The expression of his countenance, as he was about to leave his house, is as vividly impressed on the writer's mind to-day as if, in-

stead of it being twenty-six years ago, it were but yesterday. His face was pale, even for him whose countenance never wore a high color, and there was a look of mental suffering on his features that must have pained all who knew and loved him. He looked like a man who knew he was going to certain death. Just before mounting his horse to ride away, he had some conversation with a man who was at the Mansion, we understood at the time he was a lawyer, and asked him to go with him. He refused. Joseph repeated his request, offering him his favorite horse, "Joe Duncan," to ride; but he persisted in his refusal. We were a boy at the time; but we felt indignation at his not complying with Joseph's repeated desire; his conduct appeared unfeeling.

Joseph doubtless felt, as matters had then turned, that he must give himself up, let the consequences be what they might, or the inhabitants of the city would be destroyed by a lawless mob, under the sanction of the Governor. He had stood in the post of danger always, the brunt of the battle had fallen upon him, and his breast had been continually exposed to the shafts of the wicked. He would not falter or shrink now. Had the people valued him as they should have done, he might have been spared much difficulty and suffering. In the present instance, had they been fully awake to his peril, they would have used every effort to prevent him from going to Carthage and placing himself in the power of the worse than wild beasts who were there. Better, far better, would it have been for the people to have permitted Joseph to go away, and borne whatever vengeance the Governor would have seen proper to have visited upon them than to have had him murdered. But had Joseph been kept in safety, and the Governor and his crew had become convinced that he was beyond their reach, we are morally certain the storm would have passed over and the people and city would not have suffered. There was a feeling among the Saints that Joseph was to live. He had been in many troubles before and had escaped in safety, and it was presumed that he would also on this occasion. The people, however, learned, by sad experience, that though this is the last dispensation, the wicked are permitted to kill prophets and apostles now as well as in ancient days. Has the church profited by the lesson? Do its members value the life of God's prophet, whom they have to lead them to-day, more than they do their own selfish desires? Would they, should difficulty ever arise, prefer standing in the gap themselves than to have him do so? We sincerely hope they would.

(To be continued.)

A SMALL privateer of forty or fifty men, having on board some hives made of earthenware, full of bees, was pursued by a Turkish galley manned by five hundred seamen and soldiers. As soon as the latter came alongside, the crew of the privateer mounted the rigging with their hives, and hurled them down on the deck of the galley. The Turks, astonished at this novel mode of warfare, and unable to defend themselves from the stings of the enraged bees, became so terrified that they thought of nothing but how to escape their fury; while the crew of the small vessel, defended by masks and gloves, flew upon their enemies, sword in hand, and captured the vessel almost without resistance.—*Selected*.

It is found that, at Philadelphia, the mean velocity of the wind, during the entire year, is eleven miles per hour; nine miles in summer and fourteen in winter. At Toronto its annual velocity is nine miles per hour. The mean velocity of the wind at sea is estimated at eighteen miles per hour.—*Loomis*.

[For the *Juvenile Instructor*.]

MISSIONARY SKETCHES.

OUR first duty, after securing lodgings, was to repair to a convenient mountain, on the top of which we found a steep knob that rose suddenly and formed a table of thirty or thirty-five feet in width. On the way up we picked up a rock apiece, with which we formed a rude altar. We then sung a hymn, and each one, in his turn, expressed his desires. The oldest, who was also the president, was selected to be mouth in prayer. He embodied our desires in his prayer. They were that the Lord would make a speedy work on those islands, open an effectual door for the preaching of the gospel, confound all opposers, help us to gather out the honest-in-heart, and spare our lives to return home in safety. Having thus dedicated the land and ourselves to the Lord, one of the Elders spoke in tongues and uttered many comforting promises, and another interpreted. The spirit of the Lord rested powerfully upon us, and we were filled with exceeding great joy. I had the satisfaction, afterward, of witnessing the fulfilment of the promise made on that occasion. The sun was sinking low in the heavens when we got through. Our descent was quickly made, for we felt joyful, and when men are joyful and the spirit of God rests upon them, they feel lithe and active. We had been in the presence of the Lord, and had felt His power, and why should we not be happy?

The president of the mission had chosen as his companion the next oldest man. The most suitable place for them to remain at, we all felt, was Honolulu. But what must the rest do? Scatter among the other Islands, or remain on that Island—Oahu—until they learned more of the condition of affairs? It was decided that to go to the various islands would be the wisest plan. There were four islands of importance yet to be occupied, and there were eight of us remaining. But who were to be partners, and how should we decide which island each couple should go to? The president did not like to pair us off, nor to say which of the islands we should go to; but he consented, with his partner, to select four out of the eight to preside, one on each of the islands. We withdrew while they discussed this matter, and made this selection. To my great surprise, when we returned, I found that I was chosen as one of the four. Never in my life did I feel my weakness more sensibly than on that occasion. I was the youngest of the party and felt that I was the least able of all to perform the duties assigned me.

The next thing was to select partners and islands; and how do you think we did this? You read in the Bible about casting lots. We cast lots. Four pieces of paper were marked: *One, two, three and four*. The one who drew *one* had the first choice of partners; so with the second, third and fourth numbers. Then the islands were marked on slips of paper in the same manner, and we drew for them. Number one fell to my lot. I had the first choice. My mind had not rested on any one as my choice for partner, and I was at a loss for a few moments whom to select. Then the spirit of the Lord plainly told me to choose Bro. J. K. I did so. I was both surprised and pleased at the manner in which he received my choice; for being so young, and he so much my senior, I had thought that he would prefer a partner of more mature years and experience. He afterwards told me that when the four were chosen, and he found that I was one of them, he had slipped out and prayed to the Lord that I might be led to select him to go with me. His prayer was heard and answered, and we both were gratified.

In casting lots for islands Maui fell to us. When we were sailing past it my feelings were drawn towards that island, and I felt that I would like that to be my field of labor. I know not why this should have been so, except that the Lord gave me the feeling, for I knew nothing concerning it that would make it a desirable place in my eyes. My joy was very great that evening, because of these precious manifestations of God's goodness. I felt that He was near at hand to hear and answer prayer, and to grant the righteous desires of our hearts; and how could we doubt His providence for and care over us in the future?

Children, I know of no feeling that can fill the human breast with such unspeakable happiness, joy and confidence as faith in God. If God be with us who can be against us?

(*To be continued.*)

THE ingenuity of private enterprise in baffling governmental taxation upon trade is inexhaustible. At one period a great deal of lace was smuggled into France, from Belgium, by means of dogs trained for the purpose. A dog was caressed and petted at home, fed on the fat of the land, thence, after a season, sent across the frontier, where he was tied up, half starved, and ill treated. The skin of a bigger dog was then fitted to his body, and the intervening space filled with lace. The dog was then allowed to escape, and make his way home, where he was kindly welcomed with his contraband charge. The custom-house officials, at length getting scent of the practice, made an exterminating war upon the dogs; and, by offering a bounty of three francs apiece for their destruction, they got rid of 49,278 dogs from 1820 to 1836.—*Selected.*

PERHAPS one of the most delicious pieces of diplomatic affectation on record is the letter of introduction given by the Spanish sovereigns to Columbus, to be delivered to the potentates of the world he was going to discover. It runs as follows:

FERDINAND and ISABELLA to KING——:

The sovereigns have heard that he and his subjects entertain great love for them and for Spain. They are, moreover, informed that he and his subjects very much wish to hear news from Spain, and send, therefore, their admiral Ch. Columbus, who will tell them that they are in good health and perfect prosperity.

GRANADA, April 30, 1492.

Selected.

KISSING THE BABY.

Little rosebud mouth,
Sweet as sweet can be!
Can you kiss me, now?
Darling let me see.
Pearly feet be still,
That will never do!
Papa's very eyes!
Oh, the bonny blue!

Round my neck awhile
Dimpled arms you lay;
Cheek upon my own—
That's the pretty way!
Little mouth to mine—
Baby, don't you know?
Now a loving kiss—
So! and so! and—so!

Selected.

[For the *Juvenile Instructor*.]THINGS WE SHOULD BE
THANKFUL FOR.

A TEACHER in one of our Sabbath schools, some few weeks since, asked his pupils to write, and bring to him on the following Sunday, a list of the blessings they ought to thank God for. The next Sabbath quite a number of the scholars handed him their "pieces," which we have had the pleasure of perusing. We deem them highly creditable to the faith and good sense of the little writers, and have selected a few, to present to the readers of the JUVENILE INSTRUCTOR. The first is the composition of a young lady, and runs as follows:—

"We should be thankful that we live in this day and age of the world.

"We should be thankful that our parents are in the Church of Christ.

"We should be thankful for being permitted to dwell with the Saints of God in the valleys of the mountains.

"We should be thankful for having such a man as President Brigham Young to lead us in the paths of truth and righteousness.

"We should be thankful that the Lord has preserved us from the power of our enemies.

"We should be thankful for having the spirit of God with us at all times.

"We should be thankful for having the privilege of having a place to worship God, according to the dictates of our own consciences.

"We should be thankful for having Sunday and day schools to go to, where we can be taught the things of God, and all else that will be for our good.

"We should be thankful for such a beautiful city to live in, for comfortable homes, plenty to eat and to wear, and so many of the comforts of life. A. M."

The next is also the work of one of our little sisters:—

"I ought to thank God for having a being upon the earth; for kind parents to train me and send me to school, and for kind teachers to instruct me while I am at school.

"For having a house to live in; a fire to add to the comforts of home; food to sustain my body and clothes to wear.

"For the sun that shines by day, and the moon and stars by night; for rain to moisten the earth and make plants grow.

"For having these peaceful valleys of the mountains to dwell in, and for the enjoyment of health and strength.

"And, lastly, I ought to be thankful for everything. H. P."

Our last is from the pen of a little boy. No one who reads it need be told that his years do not number many on earth.

"I am thankful to my Heavenly Father for:—a father and mother; kind brothers and sisters; a house to live in; food to eat; clothing to wear; water to drink; rain to water the land; the sun that shines; the fruit trees; the birds of the air; the cows that give milk; the hens that lay eggs; the flowers to perfume the air; the sheep that give wool; a fire to keep me warm; a bed to rest on; the light of the gospel; my home in this valley; the peace that prevails here; and every blessing I enjoy. W. R. P."

Perhaps some of our little readers could follow this example with profit to themselves, and write down what they deem they should be thankful to God for. It will take them but a few moments to decide that life, with every blessing that attends it, is the free gift of our Father in Heaven, and in the words of one of our little friends, "we should thank God for everything." G. R.

"As white as snow," is one of the most familiar of all comparisons, and yet in the Arctic regions, and in certain mountainous districts, huge tracts of red snow are to be found. The color is produced by an immense multitude of microscopic plants, consisting only of gelatinous cells, which give a pink color to the snow, and which, when pressed together, leave a stain as if of blood. This plant is found upon moist rocks, and, when in that position, is green. By some the change of color, with change of location, is thought to be due to the effect of the white of the snow upon the light.

DISOBEDIENCE.

By the gate of the garden, near the wood,
A brother and sister together stood.
"Beyond the gate you are not to roam,"
Their mother had said as she quitted home;
But, tired of playing within the bound,
Frank opened the gate and they looked around.
"O Jessie," he cried, "how I long to go
To play for awhile in the wood below!"

"But, Frankie, what did our mother say?"
Said the little one tempted to go astray.
"She thought in the wood we might get harmed,"
Said Frank; "but we need not be alarmed;
There is nothing to hurt us, and oh! just see
That beautiful squirrel on yonder tree!"
And away ran Frank to the green retreat,
While Jessie followed with flying feet.

They chased the squirrel with laugh and shout,
They gathered the flowers and played about;
And then as they feared it was getting late,
Returned unharmed to the garden gate.
No questions were asked, and nobody knew
What Frank and Jessie had dared to do,
Till Saturday night, as they sat alone,
Frank, to his mother, the truth made known.

"But, mother," he said "tho' we went in the wood
We got no harm, as you thought we should;
Into the water we did not fall,
Nor did we injure our clothes at all."
"My son," was the answer, "it may be so,
Yet something you lost in the wood, I know;
Think well, and then tell me," the mother said,
As she laid her hand on Frankie's head.

"My knife, my ball, my pence," thought he,
"I have them all safe—and what could it be?"
I know," at length he said with a start—
"I have lost the happy out of my heart!
I have not felt easy since then," he sighed,
"And I could not be merry, although I tried.
Mother, I'm certain not all my play
Made up for the loss that I had that day!"

Selected.

AN artesian well in Louisville, Kentucky, has a depth of 2,086 feet; one in St. Louis has a depth of 2,200 feet; while that of Columbus, Ohio, is 2,575 feet deep. The boring at Columbus indicates an increase of temperature of one degree Fah. for every 71 feet; that at Louisville gives an increase of one degree for every 76 feet.—*Loomis*.

DURING sea-voyages the natives of the Malay Archipelago make use of a water-clock. This is a very ingenious contrivance, which measures time well in both rough weather and fine. It is simply a bucket half-filled with water, in which floats the half of a well-scraped cocoanut shell. In the bottom of this shell is a very small hole, so that when placed to float in a bucket, a fine thread of water squirts up into it. This gradually fills the shell, and the size of the hole is so adjusted to the capacity of the vessel that, exactly at the end of an hour, plump it goes to the bottom.

JUVENILE INSTRUCTOR

Is published in Salt Lake City, Utah Territory,
EVERY OTHER SATURDAY.

GEORGE Q. CANNON, EDITOR & PUBLISHER.

Single Copy, per Annum.....\$3 00.

Single Copy, for Six Months..... 1 50.

Grain brought to this City for the JUVENILE INSTRUCTOR will be received at the office of our paper—DESERET NEWS BUILDINGS.